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(DEMOLITION) **DESCRIPTION SYMBOL** RX ADDRESSABLE FIRE ALARM MANUAL PULL STATION RX FIRE ALARM VISUAL (STROBE) DEVICE (WALL/CEILING MOUNTED) SUPERSCRIPT 'C' DENOTES CEILING MOUNTED RX FIRE ALARM AUDIO (SPEAKER) DEVICE SUPERSCRIPT 'C' DENOTES CEILING MOUNTED RX FIRE ALARM COMBINATION AUDIO/VISUAL (SPEAKER/STROBE) DEVICE 15,30, 75 SUPERSCRIPT 'C' DENOTES CEILING MOUNTED SUBSCRIPT '15, 30, 75' DENOTES CANDELA RATING RX SPRINKLER PIPE RX SEMI-RECESSED SPRINKLER HEAD (ETR) **SYMBOL DESCRIPTION** ETR SPECIAL CABINET - TYPE AS NOTED ETR ADDRESSABLE FIRE ALARM MANUAL PULL STATION ETR SMOKE DETECTOR ETR HEAT DETECTOR ETR DUCT SMOKE DETECTOR ETR SMOKE DAMPER ETR FIRE ALARM VISUAL (STROBE) DEVICE 15,30, SUPERSCRIPT 'C' DENOTES CEILING MOUNTED SUBSCRIPT '15, 30, 75' DENOTES CANDELA RATING ETR FIRE ALARM AUDIO (SPEAKER) DEVICE SUPERSCRIPT 'C' DENOTES CEILING MOUNTED ETR FIRE ALARM COMBINATION AUDIO/VISUAL (SPEAKER/STROBE) DEVICE SUPERSCRIPT 'C' DENOTES CEILING MOUNTED SUBSCRIPT '15, 30, 75' DENOTES CANDELA RATING ETR COMBINATION DOOR HOLDER/CLOSURE ETR WATERFLOW/PRESSURE SWITCH ETR VALVE TAMPER SUPERVISORY SWITCH ETR SPRINKLER PIPE ETR SEMI-RECESSED SPRINKLER HEAD (NEW WORK) **SYMBOL DESCRIPTION** SPECIAL CABINET - TYPE AS NOTED ADDRESSABLE FIRE ALARM MANUAL PULL STATION MOUNTING HEIGHT 48" UNLESS NOTED OTHERWISE WP FIRE ALARM VISUAL (STROBE) DEVICE MOUNTING HEIGHT 80" UNLESS NOTED OTHERWISE 75**,**110 SUPERSCRIPT 'WP' DENOTES WEATHERPROOF SUPERSCRIPT 'C' DENOTES CEILING MOUNTED SUBSCRIPT '15, 30, 75, 110' DENOTES CANDELA RATING FIRE ALARM AUDIO (SPEAKER) DEVICE MOUNTING HEIGHT 80" UNLESS NOTED OTHERWISE SUPERSCRIPT 'C' DENOTES CEILING MOUNTED WP C FIRE ALARM COMBINATION AUDIO/VISUAL (SPEAKER/STROBE) DEVICE MOUNTING HEIGHT 80" UNLESS NOTED OTHERWISE SUPERSCRIPT 'C' DENOTES CEILING MOUNTED SUPERSCRIPT 'WP' DENOTES WEATHERPROOF DEVICE SUBSCRIPT '15, 30, 75, 110' DENOTES CANDELA RATING SMOKE SENSOR RA,SA DUCT MOUNTED SMOKE SENSOR - PHOTOELECTRIC TYPE SUPERSCRIPT 'SA' DENOTES SUPPLY AIR SUPERSCRIPT 'RA' DENOTES RETURN AIR MAGNETIC DOOR HOLDER JUNCTION BOX - SIZE AS REQUIRED SPRINKLER PIPE SEMI-RECESSED SPRINKLER HEAD WITH CHROME FINISH AND MATCHING CHROME ESCUTCHEON SMOKE BARRIER FIRE ALARM/SPRINKLER ZONE BOUNDARY DRAWING NOTE NUMBER

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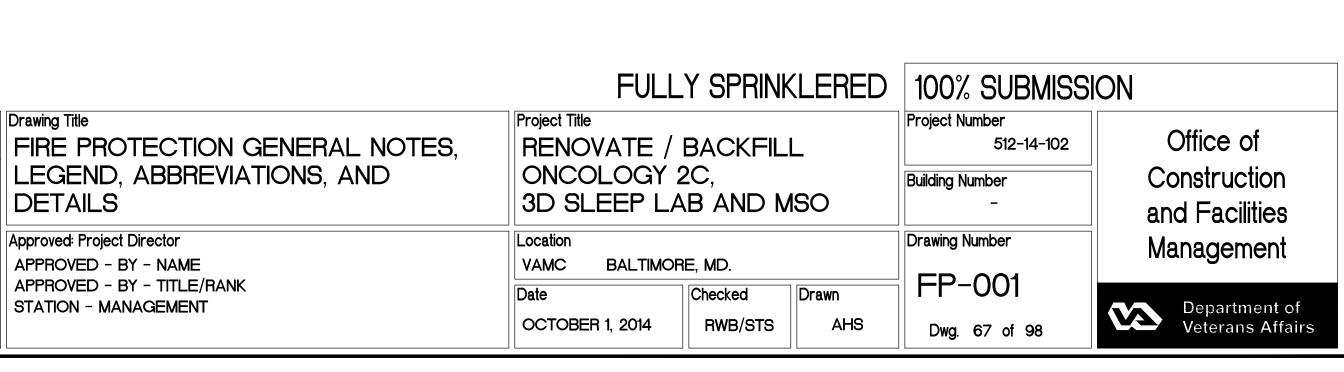
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FIRE PROTECTION LEGEND

FIRE PROTECTION GENERAL NOTES:

- 1. THE FIRE PROTECTION SYSTEM (SPRINKLER/FIRE ALARM/DETECTION) SHALL BE DESIGNED, FABRICATED, PROGRAMMED, INSTALLED, TESTED AND PLACED INTO SERVICE IN ACCORDANCE WITH THE REQUIREMENTS AND APPENDIX OF NFPA 13, NFPA 25, NFPA 70, NFPA 72, NFPA 90A, NFPA 101, NFPA 241, LOCAL AND STATE CODES AND APPLICABLE AMENDMENTS, THE IBC AND THE CONTRACT DOCUMENTS.
- THE GENERAL SCOPE OF THE AUTOMATIC FIRE SPRINKLER SYSTEM SHALL CONSIST OF THE FOLLOWING FOR ALL AREAS OF THE PROJECT AS SHOWN:
- A. MODIFICATIONS AND ADDITIONS TO THE EXISTING SYSTEM AS INDICATED
- 3. THE GENERAL SCOPE OF THE AUTOMATIC FIRE ALARM EVACUATION AND DETECTION SYSTEM SHALL CONSIST OF THE FOLLOWING FOR SELECTED AREAS OF THE PROJECT AS SHOWN:
 - A. MODIFY THE EXISTING ADDRESSABLE FIRE ALARM CONTROL PANEL (MANUFACTURER: SIEMENS) WITH VOICE EVACUATION. AND SELECTIVE DEMOLITION OF THE EXISTING FIRE ALARM SYSTEM DEVICES.
 - B. WHEN THE EXISTING FIRE ALARM SYSTEM IS OUT OF SERVICE FOR MORE THAN 4 HOURS IN A 24 HOUR PERIOD, THE AHJ SHALL BE NOTIFIED, AND AN APPROVED FIRE WATCH SHALL BE PROVIDED BY THE FIRE PROTECTION INSTALLER (S). THIS RULE SHALL APPLY UNTIL THE FIRE ALARM SYSTEM HAS BEEN RETURNED TO SERVICE, AND DETERMINED ACCEPTABLE BY THE AHJ.
 - C. THE FIRE ALARM/ELECTRICAL INSTALLER (S) IS RESPONSIBLE FOR THE COORDINATION AND COSTS TO INTEGRATE AND PERFORM A COMPLETE FUNCTIONAL TEST TO CERTIFY BOTH THE NEW AND EXISTING FIRE ALARM SYSTEM (MANUFACTURER: SIEMENS). THIS TEST SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER. COSTS DO NOT INCLUDE THE REQUIRED COSTS TO REPAIR THE EXISTING SYSTEM COMPONENTS.
 - D. DEPENDING ON THE FIRE ALARM NOTIFICATION APPLIANCE DEVICE CALCULATIONS ON THE EXISTING FIRE ALARM POWER BOOSTER PANEL(S), THE FIRE ALARM/ELECTRICAL INSTALLER(S) SHALL PROVIDE ADDITIONAL FIRE ALARM POWER BOOSTER PANELS TO MATCH EXISTING INCLUDING ALL ASSOCIATED FIRE ALARM WIRING, CONDUIT, AND 120V BRANCH CIRCUIT WIRING AND CONDUIT. THE FIRE ALARM POWER BOOSTER PANEL SHALL BE INSTALLED ADJACENT TO THE EXISTING PANEL.
- 4. THE FIRE PROTECTION INSTALLER(S) SHALL SUBMIT AS NEEDED COMPLETE LAYOUT SHOP DRAWINGS, CALCULATIONS, AND ANNOTATED MANUFACTURER'S DATA INFORMATION TO THE OWNER AND ENGINEER OF RECORD FOR REVIEW AND APPROVAL. APPROVALS SHALL BE OBTAINED BEFORE THE PURCHASE OR INSTALLATION OF EQUIPMENT.
- 5. THE FIRE PROTECTION INSTALLER(S) SHALL BE RESPONSIBLE FOR ALL APPLICABLE TRADE PERMITS AND REQUESTS FOR INSPECTION AND TESTING AS REQUIRED BY THE APPROVING AHJ.
- 6. THE FIRE PROTECTION INSTALLER(S) SHALL COORDINATE ALL SYSTEM PIPING, DEVICES, CONDUIT, EQUIPMENT, AND RELATED APPURTENANCES WITH THE BUILDING STRUCTURAL, MECHANICAL AND ELECTRICAL ELEMENTS, INCLUDING BUT NOT LIMITED TO, STRUCTURAL MEMBERS AND SYSTEMS, AIR DUCTS AND OUTLETS, LIGHT FIXTURES, AND SIMILAR EQUIPMENT AND MATERIAL THAT MAY INTERFERE WITH THE PROPER INSTALLATION AND OPERATION OF THE SYSTEM. SUBMIT, AS NEEDED LAYOUT SHOP DRAWINGS COORDINATED WITH ALL TRADES.
- 7. THE FIRE PROTECTION SYSTEM PIPING, PANELS, CONDUIT AND DEVICES SHALL BE INSTALLED NEAT AND IN A WORKMANLIKE MANNER. CONFORM TO THE LATEST TRADE PRACTICES. PIPING AND CONDUIT ROUTING SHALL BE ROUTED PARALLEL OR PERPENDICULAR TO BUILDING LINES AND PROPERLY MOUNTED/SECURED TO THE BUILDING STRUCTURE.
- 8. THE FIRE PROTECTION SYSTEM WORK SHALL BE COORDINATED WITH SPECIAL TRADES (ELEVATOR, ENERGY MANAGEMENT, COMPUTER DATA, ETC) AS APPLICABLE
- TO THE PROJECT.

 9. THE TERM 'PROVIDE' MEANS TO FURNISH AND INSTALL COMPLETE AND READY FOR THE INTENDED USE.
- 10. THE FIRE PROTECTION INSTALLER(S) SHALL PROVIDE ALL NECESSARY PARTS AND ACCESSORIES EVEN THOUGH THE PARTS AND ACCESSORIES ARE NOT SPECIFICALLY MENTIONED OR SHOWN WITHIN THE CONTRACT DOCUMENTS.
- 11. ALL FIRE SPRINKLER SYSTEM PIPING AND EQUIPMENT SHOWN ARE FOR SUGGESTIVE PURPOSES ONLY AND SHALL NOT BE SCALED.
- 12. FIRE SPRINKLER PIPE HANGERS AND PIPE SUPPORTS AND SPACING SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13. ALL HANGER MATERIALS SHALL BE ULLISTED.
- 13. ALL FIRE SPRINKLER PIPE AND FITTINGS SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13. NO PLAIN END FITTINGS WITH EXTERNAL LOCKING MECHANISM SHALL BE USED.
- 14. ALL FLOOR AND WALL PENETRATIONS SHALL BE CORE DRILLED AND COORDINATED WITH THE BUILDING STRUCTURAL SYSTEM. UNO SLEEVES SHALL BE PROVIDED AT THE FLOOR AND/OR WALL PENETRATION IN ACCORDANCE WITH NFPA 13.
- 15. FIRE ALARM SYSTEM CONDUCTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 70. THE CONDUCTORS SHALL NOT BE INSTALLED WITH CONDUCTORS OF LIGHTING OR POWER SYSTEMS. THE SUM OF THE CROSS—SECTIONAL AREA OF THE INDIVIDUAL CONDUCTORS SHALL NOT EXCEED 40 PERCENT OF THE INTERIOR CROSS SECTIONAL AREA OF THE CONDUIT. PROVIDE NO LESS THAN 3/4—INCH FIRE ALARM SYSTEM CONDUIT THROUGHOUT.
- 16. FIRE ALARM WIRING, CONDUIT SIZES AND QUANTITIES SHALL BE IN ACCORDANCE WITH THE FIRE ALARM SYSTEM MANUFACTURER'S RECOMMENDATION, NFPA 70 AND NFPA 72, UNO.
- 17. FIRE ALARM SYSTEM DETECTION DEVICES (SMOKE DETECTORS, DUCT SMOKE DETECTORS), AS APPLICABLE TO THE PROJECT, SHALL BE SPACED AND LOCATED IN ACCORDANCE WITH NFPA 72 AND NFPA 90A UNO.
- 18. THE FIRE PROTECTION SYSTEMS SHALL BE INSTALLED/MODIFIED IN AN OCCUPIED BUILDING.
- 19. ALL FIRE ALARM AND FIRE SPRINKLER SYSTEM OUTAGES/SHUTDOWNS SHALL BE COORDINATED WITH THE VA AND PROJECT CONSTRUCTION MGR. REQUESTS SHALL BE PROVIDED IN WRITING A MINIMUM OF 7 DAYS IN ADVANCE OF THE PLANNED OUTAGE.
- 20. FOR PROJECT PHASING AND ALTERNATES, SEE ARCHITECTURAL DRAWINGS.
- 21. THE FIRE PROTECTION INSTALLER(S) FOR THIS PROJECT SHALL COORDINATE WITH VA PROJECT MANAGER FOR THE FOLLOWING PROJECTS THAT WILL BE UNDER CONSTRUCTION DURING THIS PROJECT, AND WILL HAVE IMPACT ON THE FIRE ALARM SYSTEM:
 - A. VA MEDICAL CENTER FIRE ALARM SYSTEM REPLACEMENT



]	PARTIAL/EXIST BELL CODE	S SCHEDULE	
ALARM ZONE *	ALERT ZONE **	ALARM ZONE *	ALERT ZONE *
1ST FLOOR		4TH FLOOR	
QUAD A	QUAD B & QUAD D	QUAD A	QUAD B & QUAD D
QUAD B	QUAD A & QUAD C	QUAD B	QUAD A & QUAD C
QUAD C	QUAD B & QUAD D	QUAD C	QUAD B & QUAD D
QUAD D	QUAD A & QUAD C	QUAD D	QUAD A & QUAD C
2ND FLOOR		5TH FLOOR	
QUAD A	QUAD B & QUAD D	QUAD A	QUAD B & QUAD D
QUAD B	QUAD A & QUAD C	QUAD B	QUAD A & QUAD C
QUAD C	QUAD B & QUAD D	QUAD C	QUAD B & QUAD D
QUAD D	QUAD A & QUAD C	QUAD D	QUAD A & QUAD C
3RD FLOOR		6TH FLOOR	
QUAD A	QUAD B & QUAD D	QUAD A	QUAD B & QUAD D
QUAD B	QUAD A & QUAD C	QUAD B	QUAD A & QUAD C
QUAD C	QUAD B & QUAD D	QUAD C	QUAD B & QUAD D
QUAD D	QUAD A & QUAD C	QUAD D	QUAD A & QUAD C
* TEMPORAL THREE	TONES PLUS STROBE ACTIVATION	ON IN ALARM ZONE.	
** RECORDED VOICE	MESSAGE ONLY IN ALERT ZON	IES.	
TREAT EACH INTERST	ITIAL FLOOR, BASEMENT AND 7	7TH FLOOR AS ITS OWN S	EPARATE ALARM ZONE.

CIRCUITS/PATHWAYS WIRING DESIGNATION BY CLASS/LEVEL				
THE INSTALLATION OF ALL PATHWAY WIRING, CABLE, AND EQUIPMENT SHALL BE IN ACCORDANCE WITH NFPA 70 AND APPLICABLE REQUIREMENTS OF NFPA 72.				
CLASS IDENTIFIER	PATHWAY CLASS DESIGNATION REQUIREMENTS	LEVEL IDENTIFIER LEVEL DESCRIPTION REQUIREMENTS		
A	 IT INCLUDES A REDUNDANT PATH. OPERATIONAL CAPABILITY CONTINUES PAST A SINGLE OPENING CONDITIONS THAT AFFECT THE INTENDED OPERATION OF THE PATHWAY ARE ANNUNCIATED. 	G. LEVEL 0 1. NOT REQUIRED TO HAVE ANY PROVISIONS FOR PATHWAY SURVIVABILITY. LEVEL 1 1. PATHWAYS SURVIVABILITY LEVEL 1 SHALL CONSIST OF		
В	 IT DOES NOT INCLUDE A REDUNDANT PATH. OPERATIONAL CAPABILITY STOPS AT A SINGLE OPEN. CONDITIONS THAT AFFECT THE INTENDED OPERATION OF THE PATHWAY ARE ANNUNCIATED. 	PATHWAYS IN BUILDINGS THAT ARE FULLY PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13, WITH ANY INTERCONNECTING CONDUCTORS, CABLES, OR OTHER PHYSICAL PATHWAYS INSTALLED IN METAL RACEWAYS.		
С	 IT INCLUDES ONE OR MORE PATHWAYS WHERE OPERATIONAL CAPABILITY IS VERIFIED VIA END—TO—END COMMUNICATION, BUT THE INTEGRITY OF INDIVIDUAL PATHS IS MONITORED. A LOSS OF END—TO—END COMMUNICATION IS ANNUNCIATED. 	LEVEL 2 PATHWAY SURVIVABILITY SHALL CONSIST OF ONE OR MORE OF THE FOLLOWING: 1. 2-HOUR FIRE-RATED CIRCUIT INTEGRITY (CI) CABLE. 2. 2-HOUR FIRE-RATED CABLE SYSTEM (ELECTRICAL CIRCUIT PROTECTIVE SYSTEMS).		
D	1. IT HAS FAILSAFE OPERATION, WHERE NO FAULT IS ANNUNCIATED, BUT THE INTENDED OPERATION IS PERFORMED IN THE EVENT OF A PATHWAY FAILURE.	 3. 2-HOUR FIRE-RATED ENCLOSURE OR PROTECTED AREA. 4. 2-HOUR PERFORMANCE ALTERNATIVES APPROVED BY THE AUTHORITY HAVING JURISDICTION. PERFORMED IN THE EVENT OF A PATHWAY FAILURE. 		
E X	 NOT MONITORED FOR INTEGRITY. IT INCLUDES A REDUNDANT PATH. OPERATIONAL CAPABILITY CONTINUES PAST A SINGLE OPEN. CONDITIONS THAT AFFECT THE INTENDED OPERATION OF THE PATH ARE ANNUNCIATED. 	LEVEL 3 PATHWAY SURVIVABILITY LEVEL 3 SHALL CONSIST OF PATHWAYS IN BUILDINGS THAT ARE FULLY PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13 AND ONE OR MORE OF THE FOLLOWING: 1. 2-HOUR FIRE-RATED CIRCUIT INTEGRITY (CI) CABLE. 2. 2-HOUR FIRE-RATED CABLE SYSTEM (ELECTRICAL CIRCUIT PROTECTIVE SYSTEMS).		
	CLASS AND LEVEL REQUIREMENTS ARE TAKEN FROM NFPA 72, 2010 EDITION, CHAPTER 12.	 3. 2-HOUR FIRE-RATED ENCLOSURE OR PROTECTED AREA. 4. 2-HOUR PERFORMANCE ALTERNATIVES APPROVED BY THE AUTHORITY HAVING JURISDICTION. PERFORMED IN THE EVENT OF A PATHWAY FAILURE. 		

